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ABSTRACT

This invention relates to radiation curable compositions comprising an alkenyl ether functional polyisobutylene, a cationic photoinitiator, and a miscible reactive diluent selected from specified organic vinyl ether compounds, epoxy functional compounds, or compounds having the formula R^8X_b , wherein R^8 is a non-silicon containing organic group, X is an organic group containing at-least one acrylate functional group, and b has a value of 1-3. The radiation curable compositions exhibit a low cure energy, have a high moisture vapor barrier, high damping characteristics, and a high refractive index, and provide a barrier to corrosive vapors and have maintained or enhanced modulus, tensile strength, and toughness.